

# VIRGINIA WILDLIFE

MAY 2008

FOUR DOLLARS







## Bob Duncan Executive Director



**W**ith spring gobbler season in full strut, I am reminded of our special Youth Spring Turkey Hunt and the opportunity that it offers not only for young people to get introduced to hunting but also for seasoned hunters to experience the thrill of their first hunt again, through someone else. I had the pleasure of mentoring a youngster last year on youth day.

It was snowy and cold, and even though he didn't get a bird that day, we did manage to see and hear nine big gobblers. Just before we decided to call it quits I leaned over and asked him if he was cold and ready to leave. He was quick to respond by saying, "Mr. Duncan, I'm not shaking 'cause I'm cold, I'm shaking 'cause I'm excited."

Needless to say, that first spring turkey hunt lit a fire in him. With great anticipation, we managed to give it a second try a

couple of weeks later and he finally hooked up on a really big gobbler. It will be an experience I am sure he will never forget and a memory that I will share for the rest of my life. That's the point of the Department's new Apprentice Hunting License, which will go into effect July 1.

With the Apprentice Hunting License, you will be able to share your joy of hunting with your children, friends, co-workers, neighbors and others. The next time someone asks, "What are you doing this weekend?" you can reply, "I'm going hunting. Why don't you come along?" Then with a quick call to our customer service line or a stop at your local hunting or fishing store, your companion will be licensed and ready to go.

Newcomers to hunting will have two years to give it a try and take the mandatory hunter education class required for a basic license. The Apprentice Hunting License doesn't take the place of that valuable instruction. It does, however, give newcomers an opportunity to get outdoors and experience hunting with a licensed hunter close at hand.

Another Department initiative underway is a joint program with the Recreational Boating & Fishing Foundation to invite folks who previously held a fishing license back to the activity they once enjoyed. Time spent fishing is always a welcome retreat, a bit of an adventure, and the perfect setting for getting back in touch with what matters most.

You may have already received a postcard or heard a radio spot reminding you to buy your fishing license. I encourage you to rediscover the fun of fishing. Buy your license today! You'll be surprised at how much you've missed it.



Beginning July 1, 2008, the Apprentice Hunting License will offer people in Virginia a new and easy way to get involved in hunting.

### Mission Statement

To manage Virginia's wildlife and inland fish to maintain optimum populations of all species to serve the needs of the Commonwealth; to provide opportunity for all to enjoy wildlife, inland fish, boating and related outdoor recreation; to promote safety for persons and property in connection with boating, hunting and fishing.

*Dedicated to the Conservation of Virginia's Wildlife and Natural Resources*

Commonwealth of Virginia  
Timothy M. Kaine, Governor

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The eastern wood pewee is a common fly-catcher of Virginia's summer woodlands and is a bird that sings its name! It arrives here in late April, about the same time the colorful spring

warblers begin filtering through the greening landscape.

©Spike Knuth



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## VIRGINIA WILDLIFE

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# Project Heal



Guide Eric Stroup (right) holds fish caught by Sgt. J. R. Salzman, USA. Salzman's dad fashioned the metal fly rod brace to attach to his son's arm/hand prosthesis.

story and photos  
by King Montgomery

**R**egardless of how you feel about the wars in Afghanistan and Iraq, we should support our troops—those mostly very young men and women from across our nation, including many from the Old Dominion, who are exposed to danger, injury and death for serving our country. They are not to blame for the politics that cause war; yet they are left to suffer the consequences of it, particularly when wounded in action.

Virginians have served their country in the military since Captain John Smith, a soldier and sailor, landed at Jamestown in 1607. Notable Virginians such as George Washington, Patrick Henry, Robert E. Lee and Thomas J. "Stonewall" Jackson all made indelible marks in the history of our state.

Since then we can add the names of many other Virginians who served in battle and are now serving overseas. Most men and women survive these wars, but some don't. Those who are injured have a long road to recovery, and we can help them along the way. Many of those who are hurt have loved the outdoors, and some, fly fishing in particular. The situation has made for a partnership of combat-wounded and fly anglers in a unique program of healing.



Guide Phil Gay ties on a fly for veteran First Lt. Ferris Butler, USA.



Mel Krieger (left) and King Montgomery take a break from supporting and encouraging the troops.



# Healing Waters

*Veterans returning from war find the mind and heart are refreshed after a day spent fly fishing in a moving stream.*



Guide Kiki Galvin coaches SFC Diane Cochran, USA, to another fish. Cochran can stand supported by crutches for short periods of time.

## Water of Life and Healing

Project Healing Waters Fly Fishing, Inc. (PHW) takes the combat-wounded to the world of fishing after the world of fighting—partnering mental with physical rehabilitation. It is heartening to see this kind of support for injured veterans. My war was similar in many ways, though it took place mostly in the jungles and paddies of Southeast Asia, but I certainly did not feel much caring or support, either while there or upon my return.

When I came home on a stretcher from Vietnam and spent months in the hospital and years trying to strengthen a leg that, while at least still attached would never be the same, no one took me fly fishing. I soon would rediscover the healing properties of water on my own, perhaps at the same time our nation did its own healing. But it is nice to know that even if our approach to wars doesn't change, our response to the aftermath can.

On this particular day, the grounds of the Rose River Farm near Syria, Virginia are a case in point. The Rose, a pretty little freestone stream that percolates out of the Blue Ridge, ran slow and clear just beyond the huge canvas open-sided tent with tables and chairs set out of the warm May sun. Other, smaller tents dotted the riverside field—raffle items in one, a fly tying demo in another, and donated items for sale in another. And a row of porta-johns were lined up in a straight, military-fashion row.

People were everywhere and well over a 100 cars and trucks were parked relatively neatly on the cropped grass. Everything reflected that fresh, early morning yellow glow. Fifteen wounded veterans congregated near the event command cupola—twelve of them would participate in the First Annual 2-Fly Tournament for Project Healing Waters Fly Fishing.





## As Many Flies as it Takes

The 2-Fly, as it is called, was organized by a relatively new Federation of Fly Fishers (FFF) group, the Eastern Blue Ridge Fly Fishers (EBRFF), who are active in Culpeper and the surrounding area. The men and women of the EBRFF proved that day what a fine bunch of people they are.

The vets ranged from Marine Corporal Bill Johnson, who lost both legs in Vietnam about the time I was there, to Army Sergeant First Class Diane Cochran, who not too long ago

was badly injured by a roadside explosive device in Afghanistan. Many young officers, non-commissioned officers, and soldiers sat in wheelchairs where some will remain for life. Several vets were walking on a prosthesis, over which waders soon would be drawn. Some had an arm or part of an arm missing.

Sgt. J. R. Salzman had an arm prosthesis ending in a hook. His father had fashioned a metal device that allowed his son to clamp a fly rod to the artificial arm. It worked beautifully and J. R. is a fine caster and angler, as determined to catch fish as he is about learning to live comfortably with his disability.

Project Healing Waters is a volunteer, non-profit group started by retired military personnel in the Washington Capital Area (including the District of Columbia, northern Virginia, and southern Maryland) and the National Capital Chapter of Trout Unlimited. It teaches disabled vets how to tie flies, how to cast, and how to fly fish at no cost to the military personnel. Angling clubs and other concerned groups sponsor various angling and other events during the year. PHW provides a needed di-

version from the rigors of rehabilitation, both physical and mental, and lends a forum for vets to relate to each other and to concerned members of the community.

The vets were guided on the Rose River by professional fly anglers from throughout the mid-Atlantic region and by a team from Michigan. Some well-known guides took part, including Charlie Meck, Eric Stoup, Phil and John Gay, Harold Harsh, William Heresniak, and Virginia guides Kiki Galvin, Rhea Topping and many more. Mel Krieger, Leigh Oliva from The Orvis Company and I also were on hand to lend support and encouragement.

One pro and one vet constituted a team. Each guide could fish two flies, and once those were lost, must stop fishing. The veterans were not limited in the number of flies. Scoring was based on a formula of which team member caught the rainbow trout, and the number and length of the fish taken. A volunteer stream monitor witnessed and measured the

*Guide and author Charlie Meck and Army First Lt. David Folkerts with one of his many trout.*





fish, and kept score. All trout were released. There also were teams of non-vets who paid entry fees to compete in the event.

At the end of the day, just before the big barbecue feast with Bluegrass entertainment began—both donated by involved Virginians—the winners were announced: William Heresniak and Staff Sergeant Russell Martin, USA-Ret, captured first place; John Gay teamed with Staff Sergeant (now Sergeant First Class) Jake Kessler, USA, took second; and Paul Ricciuti and Captain Eivind Forseth, USA, took third. The winner of the non-vet team was John Bass, a superb quadriplegic fly angler from North Carolina guided by his friend Bill Nuckles, a fine angler from southwest Virginia. Bass has been supporting PHW with time and funds since its inception and is a role model, inspiration and counselor for young soldiers who use wheelchairs. Bass has been in this for over 20 years.

Project Healing Waters is moving from a regional to a national phenomenon, and now has grassroots activities in a number of other states. Retired Navy Captain Ed Nicholson, who commanded fast boats in Vietnam and several major surface ves-

sels as well, is founder and president of PHW; John Colburn, Chief Warrant Officer, USA-Ret, is the VP; and the Board Chairman is Douglas Dear from Vienna, who opened his Rose River Farm with access to the fertile Rose River for the day. Dear also stocked over 5,000 rainbows at his own expense.

Fly fishing guide and instructor Phil Gay, who owns Trout & About Fly Fishing, is a retired Navy captain and highly decorated officer who flew combat missions in Vietnam and commanded the carrier *John F. Kennedy* during the first Persian Gulf War. Although taken aback by the severity of the injuries, he was struck by the determination of the PHW vets.

"I immediately saw that they just wanted to learn to cast. They weren't thinking about their missing arms and legs. I was really impressed with their incredibly positive attitudes," Gay remarks.

"Ms. Guided Fly Fishing" spokeswoman Kiki Galvin of Falls Church, who has worked with Sergeant Diane Cochran on casting, guided the Army NCO at the 2-Fly.

"I was so impressed with her determination not to be treated differ-

**Good News!**  
*During the 2008 Legislative Session, Virginia passed a bill that allows people who assist a disabled person hunting or fishing to do so without holding a hunting or fishing license. The law stipulates, however, that the disabled person must possess a valid Virginia hunting or fishing license.*

ently or helped too much—she was in charge the whole time."

Rhea Topping, a fly fishing guide and instructor from Upperville who edited *Rod Rage*, a fine book about fishing ethics, spoke of how she admired her one-armed angler Josh Williams, a 23-year-old Sergeant from Roanoke.

"He caught lots of fish and never lost a fly all day," she marvels.

**Lt. Ferris Butler and his guide Phil Gay take in the fine scenery along the Rose River.**





"Regardless of your politics or your opinions of this war, these people need tons of support, perhaps more mentally than physically. Project Healing Waters is showing them we care," says Topping.

Leigh Oliva represented The Orvis Company at the 2-Fly and offered his heartfelt support and encouragement to the vet anglers as he moved from beat to beat to thank the soldiers for their service to the country.

Although he didn't attend this PHW event, Lefty Kreh, who fishes on occasion in the Old Dominion with the author, is a concerned supporter who teaches fly casting to vets and to those who teach the vets. Most folks don't know that Lefty fought in World War II and was wounded at the Battle of the Bulge.

Support for the PHW 2-Fly and other events comes from members of the fly fishing industry such as FFF, Trout Unlimited, The Orvis Company, Temple Fork Outfitters, Frontiers International Travel, Simms, Winston, Jim Teeny, Inc., Scientific Anglers, and many others. Local businesses, numerous individuals, American Legion chapters and others also gave time and money. More than 240

attendees contributed to and otherwise supported the effort. Almost \$54,000 was raised on this day, but it's not enough yet to hire a full-time executive director, who will be a wounded vet, to administer the growing program. The Second Annual 2-Fly will be at Rose River Farm on May 4, 2008. Call 703-399-7396 or see [www.projecthealingwaters.org](http://www.projecthealingwaters.org) for more information.

## A Fine Diversion

The motions involved in fly tying, casting and fishing provide wonderful physical therapy for torn and tattered bodies. Damaged hands respond nicely to the tying of a fly; injured arms and shoulders and backs get a wholesome and needed workout during casting, mending and retrieving. Even more, the mind and heart are refreshed after the angler has been in a moving stream and felt the life-giving, therapeutic waters. The cool water presses against your legs, connecting you to the liquid world you once came from, so many eons ago.

In the water, my leg doesn't hurt as much. In the water, I can be so taken by my beautiful surroundings and the very essence of fly fishing

that my body and soul are healed, or at least soothed. And this is a place I can go to in my mind as I slip under the effects of anesthesia for yet another surgery.

What do the wounded vets think about PHW? The folks I spoke with were unanimous in their praise for the project, the people running it, the sincere grassroots support, concern, encouragement and, yes, the genuine affection they receive from Americans everywhere.

And about fly fishing? Sergeant First Class Diane Cochran said it well: "Never have I felt less in control of my life as I did when I arrived at Walter Reed Army Medical Center with wounds and injuries sustained in Afghanistan. Such events—like a day on the river fly fishing—have allowed me to regain some control over my life and limbs. Any day on the river is a good day. The pain goes away and for a while I am allowed to be one with nature." □

*King Montgomery, a frequent contributor to Virginia Wildlife, is a retired US Army officer who commanded infantry platoons and a rifle company in Vietnam in the late 1960s. He is an award-winning outdoor writer and photographer from Burke. Contact him at [Kingangler1@aol.com](mailto:Kingangler1@aol.com).*



*Wounded vets and their guides prepare to head to the Rose River for the competition.*



# VIRGINIA'S MYSTERY SERPENT





by Michael J. Pinder

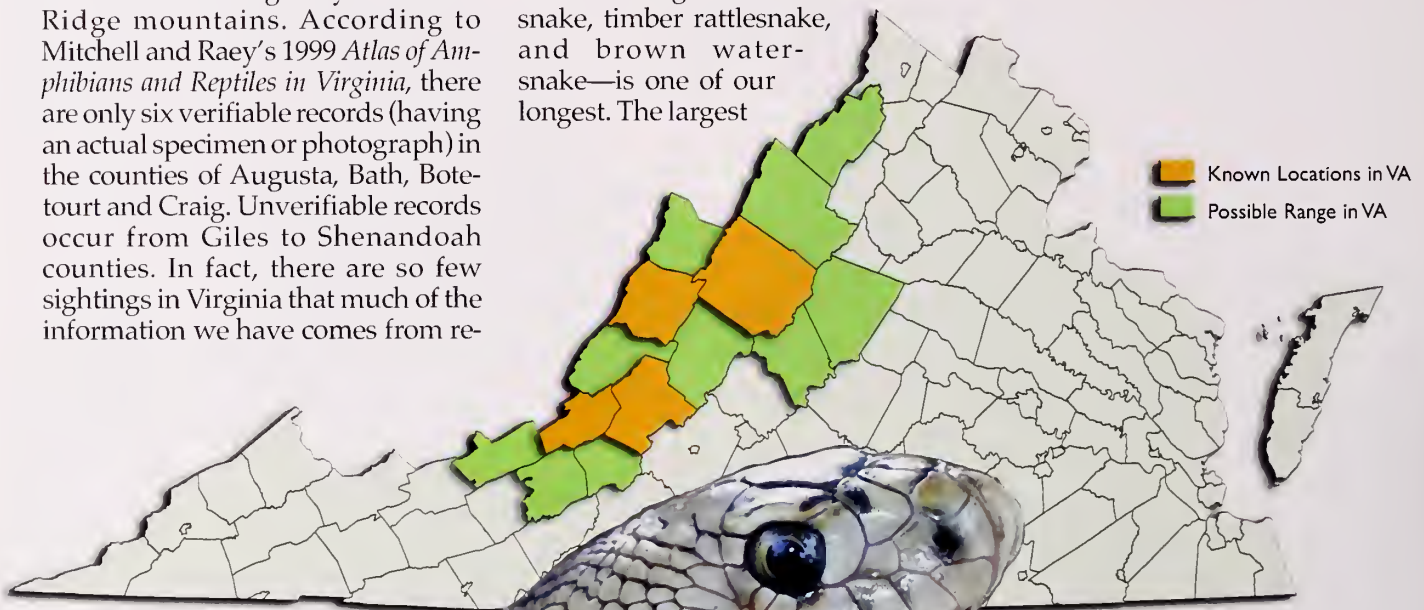
The American Northwest has its Bigfoot; the Himalayas, its Abominable Snowman; and Scotland, its Loch Ness Monster—all creatures shrouded in myth and mystery. While Virginia isn't known for these legends, it does have a creature nearly as elusive. It is a beast that is reported to be 7 feet long, lives underground, and eats its prey whole. The mystery animal is a serpent known as the northern pinesnake (*Pituophis melanoleucus melanoleucus*).

The northern pinesnake ranges from southern North Carolina to northern Georgia, Alabama, eastern Tennessee and southeast Kentucky. Smaller, isolated populations occur in New Jersey, West Virginia and Virginia. Here, sightings of this snake have occurred in west-central portions of the Allegheny and Blue Ridge mountains. According to Mitchell and Raey's 1999 *Atlas of Amphibians and Reptiles in Virginia*, there are only six verifiable records (having an actual specimen or photograph) in the counties of Augusta, Bath, Botetourt and Craig. Unverifiable records occur from Giles to Shenandoah counties. In fact, there are so few sightings in Virginia that much of the information we have comes from re-

search conducted in other portions of its range.

Based on measurements of Virginia's snake species, the pinesnake—along with the rat-snake, timber rattlesnake, and brown water-snake—is one of our longest. The largest

*Although little is known about pinesnake habitat in Virginia, it is suspected that they prefer open, dry areas on mountain slopes with rock cover.*



specimen from the few caught in the Commonwealth is 66 inches (or 5.5 feet), while the U.S. record extends to nearly 7 feet. In addition to its large size, a pinesnake can be readily identified by unique markings. The reptile has blotches that can vary from white and black to yellow and brown. These blotches are grouped close together near the head and become more separated and distinct approaching the tail. The snake's belly is white and yellow and lacks distinct patterns.

©John White





©Lindsey Pyne

*The pinesnake can track its prey down a burrow by picking up scent particles in the air using its forked tongue.*

rock cover. In other parts of its range, the species is found in pine and mixed oak forests. Active periods from April through October have been noted by researchers where pinesnakes occur in nearby states.

An advantage of burrowing is that it allows the snake to pursue its prey of mice, chipmunks and voles to their underground hideouts. Pinesnakes are also opportunists and on occasion will eat lizards, birds and bird eggs. They are non-venomous and must wrap their coils around, constrict, and kill their prey before swallowing it whole. While this works efficiently where sufficient space permits, the snake has another method of subduing prey within the narrow confines of a rodent burrow. Once in the burrow, the pinesnake has been reported to pin the rodent along the tunnel wall with its body until the prey is dead.

Currently nothing is known about the predators of pinesnakes in Virginia. In New Jersey predators include the red fox and striped skunk. Juveniles can fall victim to short-tailed shrews and other small, carnivorous mammals. Scarlet snakes have been known to prey on pinesnake eggs. But by far, humans represent the largest threat to the species.

When threatened the pinesnake behaves similarly to other large, non-

## WANT TO LEARN MORE?

- Check out our newest video about reptiles and amphibians, online at [www.dgif.virginia.gov](http://www.dgif.virginia.gov).
- Purchase a copy of "A Guide to the Snakes of Virginia." To order, go to [www.dgif.virginia.gov/estore](http://www.dgif.virginia.gov/estore) and click on "Publications."

venomous species and will quickly coil and vibrate its tail in dry leaves—sounding like a rattlesnake. If this technique does not deter the intruder, the snake will deploy a secret weapon not present in most species. It has the ability to emit a loud hissing sound, which is accomplished by inflating its lungs and moving air across a flap in its mouth. Remarkably, this noise can be heard up to 50 feet away! If the intruder proceeds even slightly closer, the snake will fall back on its old reliable behavior of striking and biting.



©Jeff Beane

*Even though active and alert, pinesnakes spend much of their lives underground and unnoticed by most people. Above: The burrow entrance of a pinesnake taken in the Sandhills of North Carolina.*



©Lindsey Pyne



**Do you want to  
see and hear  
a pinesnake?  
Check out:**

**[dgif.virginia.gov/pinesnake](http://dgif.virginia.gov/pinesnake)**

While these strategies are enough to frighten most predators, people usually respond by killing the snake. Dr. Richard Hoffman, Curator of Recent Invertebrates at the Virginia Museum of Natural History and a lifelong naturalist, recalls seeing three pinesnakes killed, skinned and tacked to the wall of a stable while visiting Douthat State Park in Allegheny County in 1946.

"There in one fell swoop," exclaimed Dr. Hoffman, "someone had killed as many pinesnakes as I had ever seen in my life."

Pinesnakes, like all snake species, need a tremendous public relations campaign. Understandably it can be difficult to appreciate an animal that doesn't have fur, feathers, or even legs. These facts notwithstanding, their contributions to natural pest control and forest health far outweigh the occasional fright we get if one crosses our path.

Although pinesnake reproductive behavior has never been observed in Virginia, research from other states indicates that they breed in the spring soon after coming out of hibernation. After mating, females either enlarge an existing rodent burrow or dig one on their own. In a New Jersey study, a snake was observed excavating in sandy soil a tunnel 10 feet long and 2 feet deep, which is pretty remarkable considering the reptile is totally limbless. By undulating from side to side, the snake is able to force sand out of the burrow with a loop in the front of her body. At times the excavated sand pile outside the burrow can reach 2 to 3 feet across!

At the end of the tunnel, the female makes a chamber 5 inches in circumference and 12 inches deep. The chamber serves as a temperature-controlled, underground incubator. The presence of egg shell fragments from previous years suggests the snake will re-use the same chamber year after year. In the chamber, she lays 3 to 27 long, white, leathery eggs. Hatchlings emerge in approximately 65 days, ranging in size from 9 to 20 inches, and appear similar to adults.

Because almost nothing is known about pinesnakes in Virginia, very little has been done to protect or manage the species. *Virginia's Wildlife Action Plan* ranks the pinesnake as a



©Lindsey Pyne

*The pinesnake remains one of the largest, yet most elusive snakes in the Commonwealth.*

*Below: The northern pinesnake can be identified by its white and black color and its blotches that spread out toward its tail.*




©John White



Tier 1 species, meaning it has dropped to critically low levels and faces an extremely high risk of extirpation across the Commonwealth. The largest threat in many areas is the destruction of habitat by development interests. In New Jersey, habitat destruction has prompted the state to list the species as threatened. The Virginia population may not be under the same pressure, because many of the known observations have occurred in national forests. However, it is unclear whether current management of national forest property is compatible with the survival of the species.

The first step to understanding more about the pinesnake is identification of its Virginia range. Unfortunately, most observations go unreported because few people realize the uniqueness of this species. Once a population can be found, scientists can gather the essential ecological and biological information needed to properly protect and manage the pinesnake and its habitat.

Until then, keep your eyes peeled and your camera ready. You just may be lucky enough to encounter Virginia's mystery serpent. 

*Mike Pinder is a regional wildlife biologist with the Virginia Department of Game and Inland Fisheries, Wildlife Diversity Division.*

## THE NORTHERN PINESNAKE NEEDS YOUR HELP

You can help conserve and protect the northern pinesnake! The Virginia Department of Game and Inland Fisheries would like your assistance in reporting current, past, live or dead pinesnake observations. If you have seen a pinesnake or know of a past observation in the state, please fill out the form below and send it to the address provided. Your personal information will remain confidential. Thank you for helping us protect a natural rarity!

Please include the following information in your observation:

Date observed: \_\_\_\_\_

Observation location (be as specific as possible): \_\_\_\_\_

County or City: \_\_\_\_\_

Snake activity: ☐ moving ☐ resting ☐ dead ☐ other (explain) \_\_\_\_\_

Additional comments: \_\_\_\_\_

The below information will be used for confirmation purposes **only**:

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Daytime phone number: \_\_\_\_\_

Additional information, such as photographs and/or location maps, is welcome and should be included when possible. Send the completed form to Mike Pinder, Virginia Department of Game and Inland Fisheries, 2206 South Main Street, Suite C, Blacksburg, VA 24060.

You can also respond via our new Web link, at

[www.dgif.virginia.gov/pinesnake](http://www.dgif.virginia.gov/pinesnake)





# Virginia's Flycatchers

story and illustrations  
by Spike Knuth

**T**hey have a habit of sitting on a high perch atop a tree or shrub. They sit waiting and watching for flying insects. When one flies by, they dash quickly up and out at their prey in a flash of wings. It's this habit that has given them the name "flycatchers." Their family name is *Tyrannidae*, or "tyrant," due to their aggressive behavior. Flycatchers are the largest family of birds in the western hemisphere, with as many as 373 species by some reports. Of these, only about 37 individual species of 10 broader genera breed north of Mexico, mostly in the west and southwest. And of those 37, only about 10 species are normally found in Virginia as breeders or migrants. With one typical exception, most of our flycatchers migrate to Central and South America in winter.

Flycatchers are not great songsters. They are all pugnacious, defending their territories with vigor. They have relatively small, weak feet; bills that are wide at the base; and hair-like bristles at the base for catching insects. Most of them tend to live near water of some kind where insect populations are high, as insects make up over 90 percent of their diet.

There are five genera within the family *Tyrannidae* found in Virginia. The larger flycatchers are *Tyrannus*, *Myiarchus*, *Sayornis*, and *Contopus*, while the smaller flycatchers are of the genus *Empidonax*.

Eastern Kingbird



Be Wild!



# tchers

The genus *Tyrannus* includes the kingbirds, which are very aggressive, prefer open country, and sit with a more horizontal posture.

## Eastern Kingbird

(*Tyrannus tyrannus*)

The eastern kingbird measures about 9 inches in length. It's not a flashy dresser, with its upper parts basically dark, slate-gray with blackish head and wings, and white breast and belly. White edges on its tail feathers appear as a band around the outside. American Indians were so impressed by its fearlessness that they named it "Little Chief." Early English settlers noted its defiant, almost tyrannical, attitude and tagged it with the name "Kingbird." Even some early naturalists named it the "tyrant flycatcher," which ultimately led ornithologists to name it *Tyrannus tyrannus*.

While all flycatchers exhibit a bold, fearless disposition, the kingbird seemingly received a greater dose of this temperament. It will chase and attack any bird of any size that dares to violate its air space or threaten its nest, including hawks, owls, crows, vultures and even eagles.

Kingbirds begin to arrive in Virginia in late April. The male performs a courtship flight in which he flutters upward, sails, flutters upward again, then falls with wings and tails spread—all in an effort to attract a female. Once paired off, the female



Great Crested  
Flycatcher

# Live Wild! Grow Wild!







Eastern Phoebe

erect posture and tend to choose more shaded areas. They are also cavity nesters.

*Great Crested Flycatcher*  
(*Myiarchus crinitus*)

This is the only *Myiarchus* found east of the Mississippi River. Great crested flycatchers return about the end of April to woodlands all over Virginia. They tend to

kingbirds sitting atop a tree or shrub. When an insect is spotted, the kingbird will fly up from its perch, uttering a series of high raspy, chattering notes as it picks off insects in flight. Afterward it coasts back to its observation perch and begins the process anew.

Kingbirds will occasionally feed on the ground, in trees, and even off the water. Moths, beetles, mosquitoes, flies, wasps and bees are their main foods, although they will eat wild berries and seeds if necessary. They begin their migration south in early August, although some stay with us through early September before heading for South America.

The genus *Myiarchus* are larger flycatchers with big, olive-colored heads and backs, yellowish bellies, and wing bars. They show a more

favor open, mature forests, but are also found in the dense edges around forest openings or near water, in old orchards, and in shade trees around farms. Like other flycatchers, they'll perch at the tops of trees or shrubs, but will also forage in the upper canopy, at mid-level, or even near the ground.

The crested flycatcher is 8½ to 9¼ inches in length and is best identified by its large, shaggy or bushy head, which is not really a crest. Its upper parts are olive drab or brownish-olive, with a gray throat and chest, fading to a yellowish belly. Its wings and tail are cinnamon-colored, which are distinctive field marks, and it shows two buff-colored wing bars.

It nests in natural cavities of dead or dying trees or branches, old woodpecker holes, or in man-made boxes or houses. There are even records of

seeks out a nesting site within the male's proclaimed territory. The kingbird shows a marked preference for areas near water and often will build over water in low bushes or small trees.

Normally, the kingbird is very noisy. On spring and early summer evenings, when insects begin to hatch and venture forth, look for



crested flycatchers nesting in mailboxes and mailing tubes! The nest is a mass of grasses, leaves, plant fibers, pine tags, cloth strips and paper, and incorporates their unusual habit of using shed snake skins. The snake skins are thought to deter predators. About three to five white eggs, spotted with brown, are laid. Crested flycatchers are mainly insect eaters, flying out from a perch to snatch flying insects out of the air, in typical flycatcher fashion. Damselflies, dragonflies, moths, cicadas, beetles, and katydids are part of their menu. However, they will come to the ground as well to feed on beetles, leaf hoppers, crickets and moth larvae.

August finds them completing all of their parenting duties as the new family prepares, beginning in September, for its migration to Mexico, or as far as Columbia.

The genus *Sayornis* are medium-sized birds, with a habit of jerking their tails downward. They lack eye rings or conspicuous wing bars and are typically found near water, usually in woodlands.

### *Eastern Phoebe*

(*Sayornis phoebe*)

The only *Sayornis* in Virginia is the eastern phoebe, one of the “early birds” of spring and the hardiest of the flycatchers. Many phoebes never leave the Piedmont and Tidewater forests of Virginia, and in some cases they’ll tough out the winter along protected mountain streams. Those that had meandered southward will begin returning as early as late-January. Since its primary diet consists of flying insects, the phoebe lives mainly near water where insect hatches occur at all times of the year. It also feeds on caterpillars, beetles and other crawling bugs. If insects are scarce, it will feed on dried, wild berries.

It’s a medium-sized, non-descript bird, being basically a dark grayish-olive above, with yellowish-white underparts. The top of its head is a darker olive-brown and is oversized, compared to the rest of its body. It has no conspicuous wing bars and no eye

ring, which sets it apart from other flycatcher relatives. The phoebe sits upright and has the habit of bobbing or jerking its long tail while perched.

During courtship it will erect its head feathers, giving it a crested or shaggy-headed appearance. At this time the male sings his song fairly constantly—described as a clear, “fee bee-pee wit”—repeated many times with the second part either ascending or descending in pitch. The phoebe is nearly silent during cold months, uttering only a clear, sharp “chip” call when its domain is invaded.

This bird is very tolerant of human company and has taken well to nesting on, in or under man-made structures such as bridges, culverts, barns, porches, eaves of houses, windowsills and shutters—any type of ledge—on cabins in the woods or cottages along a lake shore or stream. Because it builds nests mainly of moss and mud lined with grass, hair and feathers, it can plaster the nest upside a flat wall much like a barn swallow. Natural nest sites include rock ledges, overhanging banks near spring seeps, or upturned tree roots, almost always near water.



Eastern Wood Pewee





Olive-sided  
Flycatcher

Both parents incubate the average of five eggs which are white, speckled with dark brown at the large end. They raise two broods and often use the same nest year after year, refurbishing and adding to it each time. Because of this, mites that thrive in the old nests parasitize the birds and their young.

The genus *Contopus* are medium-sized flycatchers that are more forest oriented, although still strongly associated with water.

### *Eastern Wood Pewee* (*Contopus virens*)

The eastern wood pewee is a common flycatcher of Virginia's summer woodlands, and is a bird that sings its name! It's one of those birds that we are more apt to hear than see. Unless you're tuned into it, you may not notice it, but its "pee-du-weee" is a common sound all summer long. Sometimes it follows up its long song with a simple, questioning "du-weeee?"

It moves about the woodlands quietly when feeding. It may suddenly appear, as if out of nowhere, usually sitting on a dead branch, like the lower dead limb of a pine, about mid-level in the forest. In fact, this habit has resulted in the nickname "dead limb bird." It will sit patiently, waiting for its quarry to come by. As an insect flies by, the pewee darts out quickly to snatch it out of the air in expected flycatcher fashion, often with an audible snap of its bill.

The wood pewee arrives in Virginia in late April, about the same time the colorful spring warblers begin filtering through the greening landscape. Wood pewees are found statewide, mainly in dense, mature, mixed forests, but also in orchards, parklands and open groves of scattered trees, especially near streams or lakes.

Pewees sit very erect, with wings drooping slightly. Like all flycatchers their head seems overly large and their bodies, very slim. The pewee has shorter legs and longer wings proportionately than other flycatchers. Its scientific name is "*Contopus virens*," which means "short-footed" and "being green."

Color-wise it is a plain looking bird. It has dark olive or grayish-olive upper parts, with its head being darker and more brownish. Its underparts are yel-



lowish-white, with a wash of olive-gray on its breast. It measures 6 to 6½ inches in length. Its larger cousin, the eastern phoebe, is similar but the pewee shows a pair of dull whitish wing bars. The pewee returns to the same woods and often the same branch to nest each year it survives. It builds its nest on a horizontal branch near or over an off-shooting branch, about 6 to 60 feet up. The compact structure is constructed of grasses, root fibers, bark strips and moss; then camouflaged with lichens and held together with spider silk. It is lined with fine grasses and animal hair, and ends up looking like a big, flattened knot on the branch, much like that of a hummingbird.

Normally two to five eggs are laid, cream-colored with blotches and spots of dark brown and lilac forming a wreath at the large end. Typical of flycatchers, the pewee aggressively defends its nest. Incubation takes about two weeks and both parents are involved in feeding chores. Two broods are often reared, with the second brood fledging by the end of August.

About 99 percent of this flycatcher's diet consists of insects. It feeds on bees, wasps, mosquitoes, ants, caterpillars, grasshoppers, beetles and flies! Later in the year it will also eat wild berries—notably poison ivy and dogwood.

With reproduction duties complete, pewees become silent as summer turns to fall. They begin leaving Virginia in mid-September, again with migrating warblers, and by mid-October all have moved south. They winter in Central America and in northern South America.

### *Olive-sided Flycatcher* (*Contopus cooperi*)

The olive-sided does not commonly breed in Virginia and is mostly a migrant through Virginia's mountains in the far western part of the state. However, there are some reports of it appearing in other areas of Virginia where a few may even winter. These are long-bodied birds, much like the kingbird or great crested flycatcher. They are a large-billed,

big-headed, and short-tailed flycatcher that sits upright atop a dead branch or pine candle.

Their upper parts are dark gray-green, with dark, mottled sides that contrast with a long white patch down the middle of the breast, resembling an unbuttoned vest. They also show a tuft of white above folded wings on the back.

It's a bird of coniferous forests and breeds widely through the western United States and most of Canada, the upper Great Lakes region, and in northern New England. The nest is built on a horizontal branch or in a fork up to 60 feet high. They often nest in clearings formed by recent burns.

The call of the olive-sided has been described as "quick-three beers"; the "quick" being shorter and weaker, followed by the "beers" which has a long, downward slurred sound. Others describe it as "whip-weedeer." The bird feeds heavily on flying ants, wasps and bees, but also on beetles and flies. The olive-sided winters in northern South America.

(The genus *Empidonax*, or little flycatchers, will be featured next month.) □

*Spike Knuth is an avid naturalist and wildlife artist. For over 30 years his artwork and writing have appeared in Virginia Wildlife. Spike is also a member of the Virginia Outdoor Writers Association.*

**Be Wild! Live Wild! Grow Wild!** is a regular feature that highlights Virginia's Wildlife Action Plan, which is designed to unite natural resources agencies, sportsmen and women, conservationists and citizens in a common vision for the conservation of the Commonwealth's wildlife and habitats in which they live. To learn more or to become involved with this new program visit: [bewildvirginia.org](http://bewildvirginia.org).



Great Crested  
Flycatcher





©Lynda Richardson

# Clearing the Way to Re

by Alan Weaver

**D**ams have long been an important part of Virginia's landscape and culture. The original peoples of this land created fish weirs in rivers and streams, which were essentially small dams used to collect food. Over time, waterways were harnessed by more dams in response to increasing agricultural and industrial demands. Several dams in existence today still serve multiple purposes. Small impoundments on

relatively small streams, for example, provide opportunities to fish and boat. Larger dams on rivers add the benefit of a renewable energy source in the form of hydroelectricity.

However, many dams—despite their benefits—impose ecological consequences. Older dams across Virginia that once served a useful purpose are no longer necessary, and these are the dams under consideration for removal. Dam removal has recently become a major component of the Virginia Department of Game

and Inland Fisheries' Fish Passage Program, which contributes to broader fish restoration efforts. Since 2004, eight dams have been removed in the Commonwealth.

Dams directly affect migratory and resident stream fish populations by obstructing upstream, and safe downstream, movement. Dams alter natural stream flow patterns leading to undesirable changes in water depth, temperature and oxygen levels. This can cause ecological disturbances in a water body's flora and





Lee Walker

*Blueback herring, shown left, are among the migratory fish species that benefit from dam removals and fish passage projects.*

# build Fisheries

fauna. Removing stream barriers begins the process of reversing many related, negative impacts. Ecologically important freshwater mussels also benefit, as many fish species serve as upstream transport hosts for mussel larvae that temporarily attach to their gills to “hitch a ride.”

Among the primary species targeted for restoration are anadromous fish that live as adults in the ocean but must return to fresh water to spawn to complete their life cycle. Dams cut off their migratory routes. The Amer-

ican shad is just one example of a species that will benefit from dam removal. Dams also negatively impact the catadromous American eel, which lives as an adult in fresh water but must return to the sea to spawn. Many freshwater species are also affected by dams because of their need to move upstream to spawn. Fisheries biologists conduct sampling, usually by electrofishing, at or near impediments to determine if migratory fish are present and to establish a resident species list that may benefit

## Demolishing Dams for Habitat Diversity and Fish Migration

There are approximately 1,300 dams listed in the VDGIF impediment inventory, not including all small farm pond dams. According to American Rivers, at least 76,000 dams greater than 6 feet tall exist in the United States—affecting over 600,000 miles of the nation’s waterways. Approximately 25% of these dams were built around 1960, and many are reaching the end of their expected service period. More than 500 dams have been removed around the country in the past three decades.





Lee Walker



Lee Walker

**Above and right: Embrey Dam was fully removed from the Rappahannock River at Fredericksburg in 2005.**

from the provision of fish passage. Baseline data are later compared to post-project data to assess overall success.

Two basic fish passage options exist. If a dam is still serving its original purpose, a fishway is designed and constructed. For example, a vertical slot fishway was installed at Boshers Dam on the James River near Richmond in 1999 because the dam still meets many needs, including the provision of municipal drinking water. However, removal is the preferred choice if a dam has reached the end of its useful life.

Embrey Dam, built in 1910, was fully removed from the Rappahannock River at Fredericksburg by spring 2005 because it was replaced as a drinking water source and its hydropower function ceased many years ago. There are also cases where a dam no longer serves a municipal, recreational or commercial purpose, but it may offer significant historical and cultural value. Removal may still be the preferred option to provide fish passage, improve stream habitat, open up safe boating opportunities, and eliminate liability and long-term

maintenance costs. Efforts may be required to offset the loss of a dam as a cultural resource. Measured drawings and detailed photographic documentation of an existing structure, as well as leaving small portions of a dam in place, go a long way toward historical appreciation and interpretation.

One of the first major steps in a removal project is obtaining the owner's approval and cooperation. In some cases it is relatively easy to convince the owner that the best solution to fish passage and boating safety is to remove the dam. Others have even approached the Department and its partners and requested assistance to remove their dams. However, there are cases where the owner or local community may not want to see a dam removed. The case has to be made by project supporters that the pros outweigh the cons. One argument in favor of removal is that strict dam safety regulations currently in force require a rigorous inspection schedule, with the possibility of expensive safety-based upgrades. Those decisions are made by the Department of Conservation and Recreation, the agency that regulates dam safety in the Commonwealth.

Analyzing the sediments behind a dam is very important in the deci-

sion-making process. If the sediment is clean, it may simply be released downstream during removal. Dams that have been removed in Virginia so far were "run-of-the-river" situations. This means the primary spillway spans the entire width of the river and there is no storage capacity gained, as with much taller dams that form wide impoundments. Flow stays within the banks of the river under normal conditions and the water spills into a natural stream channel. In most cases the sediment behind this type of dam remains at equilibrium. The river flushes existing sediment, and new sediment is deposited during high flow event cycles. In these situations, the dam does not prevent downstream sediment transport.

Funding the design and deconstruction phases is a challenge that begins on the first day a removal project is envisioned. Money for dam removals in Virginia has come from a variety of sources, including all levels of government, non-government organizations and private foundations. The Department's fish passage program coordinates projects, which includes working with partners to assemble the funding puzzle.

Another important part of the process involves preparing for and



obtaining all necessary local and environmental permits. In-stream work may only occur outside the time of year critical to the spawning and early life stages of migratory fish (spring) and freshwater mussels (spring and again in late summer). Contractors are required to use techniques that minimize local habitat disturbance and limit downstream sediment transport. Obviously, a certain amount of disturbance results from removing a dam from a stream, but the long-term benefits outweigh the short-term effects of the project.

In February of 2004 the "modern dam removal initiative" commenced with the initial, explosive breaching of Embrey Dam. Mechanical removal of the rest of Embrey Dam and the 1855 crib dam, immediately upstream of Embrey, was completed by spring 2005, and 106 miles of the Rapahannock and Rapidan rivers once again became accessible to migrating fish.

Several recent dam removals have been completed in the Shenandoah drainage, primarily to benefit American eel and resident species, and to improve boating safety. These were the McGaheysville Dam on the South Fork, Rockland Dam on the



**A vertical slot fishway at Boshers Dam on the James River allows fish to reach their natal spawning grounds. Below: Last year, Quinn Dam on the Tye River near Route 29 was removed.**

North River, and Knightly Dam on the Middle River. In August 2007, Quinn Dam was removed from the Tye River near Rt. 29, and Woolen

Mills Dam was removed from the Rivanna River near Charlottesville. Because the Woolen and Quinn projects occur within the historical range of American shad, additional benefits may be realized in the future. Most recently in late 2007, two small dams were removed from Wilson Creek, a tributary of the upper James, downstream of Douthat State Park. Taken together, over 230 miles of Virginia's streams have been re-opened by dam removals.

With the elimination of Embrey Dam, several anadromous species—American shad, hickory shad, blueback herring, and even young striped bass—have been collected as far as five miles upstream of the former dam site during spring monitoring. The stocking of American shad fry upstream of Embrey began in 2003. On average, shad mature at age five, so 2008 will be the first year to witness a considerable number of returning fish that will spawn and contribute to restoring a healthier population.

The DGIF has also teamed up with UVA to study the effects of removing Woolen Mills Dam on the fish community of the Rivanna River. Pre-removal data collection was initiated in 2006 and post-removal data will be collected at the site starting in late spring, 2008.

Dam removal has certainly become an integral component of providing fish passage and restoring river habitat here in Virginia and throughout the Chesapeake Bay drainage basin. When a dam is removed, habitat diversity returns when runs, riffles and reaches are no longer inundated by artificially deep water. This re-creates an environment that supports aquatic species diversity. Where appropriate, dam removal progress is moving forward in Virginia. Several additional projects that would affect migratory and resident fish species are under development. The result: Dams that have outlasted their usefulness are coming down, and the fish love it! □



Lee Walker

Alan Weaver is the fish passage coordinator for the Fisheries Division of the Virginia Department of Game and Inland Fisheries.





Lee Walker

## The Rivanna Conservation Society: **Thinking Globally and Acting Locally**

by Tee Clarkson

**S**itting on a bench with my 2-year-old son, watching the geese clamor for space in Bryan Park in the city of Richmond, it is easy to forget that the water tumbling over the spillway just a few feet away will gradually work its way through the meandering creek into the Chickahominy River, then on to the James before finally spilling out into Chesapeake Bay. It is easy to forget that, for

those of us living in the Chesapeake Bay watershed, the way we treat any stretch of water marks the way we treat the bay.

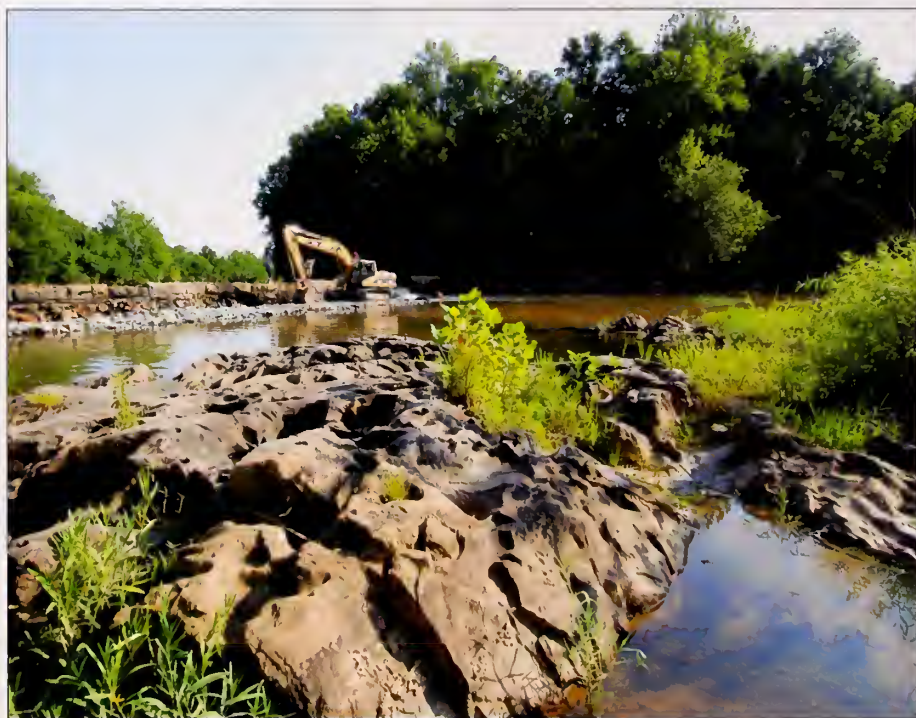
This idea, however, has never escaped the members of the Rivanna Conservation Society, who clearly recognize that maintaining the quality of a relatively small stretch of river will not only benefit them, but everyone downstream as well. Formed by a group of paddlers from Fluvanna County concerned with the quality of the Rivanna River, the Rivanna Con-

servation Society has grown by leaps and bounds over the past 17 years since its inception in 1990.

"The Rivanna Conservation Society is a classic example of 'thinking globally and acting locally,'" says Robbi Savage, executive director of RCS.

"This is because the organization recognizes the importance of being at the headwaters of the Chesapeake Bay and has programs that are focused on regional clean-up goals. At the same time, the organization's highest priority is to protect and improve the quality of the Rivanna watershed," Savage continues.

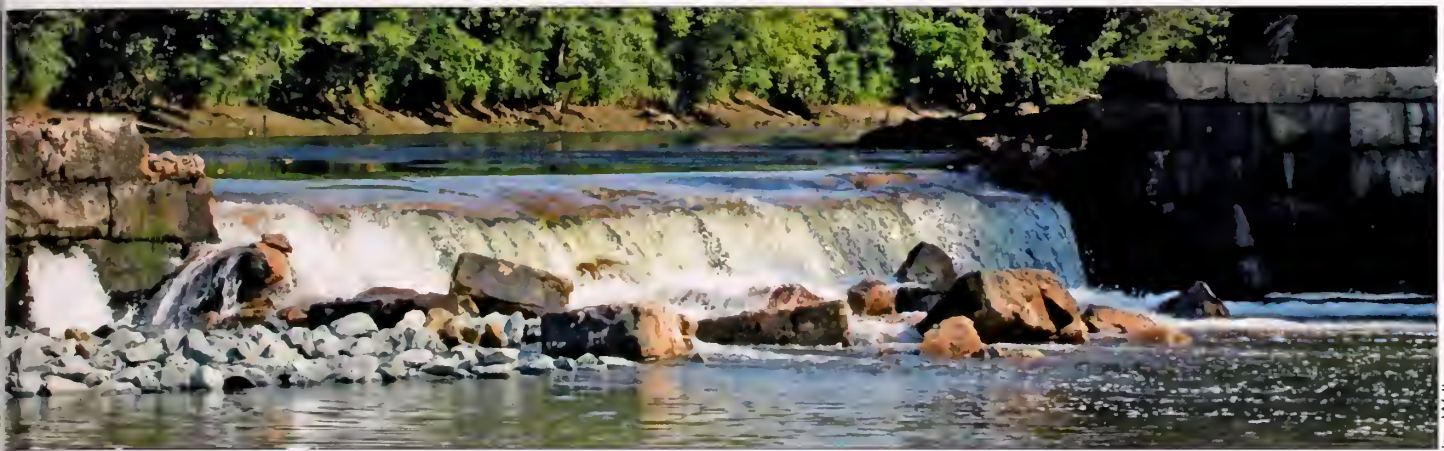
The non-profit organization receives the majority of its monetary support from members, foundations and grants, but money can only do so much to clean up a river. Members and volunteers dedicate time and muscle power to do the grunt work on the ground. Every summer RCS brings together volunteers from various environmental groups, city and county governments, as well as the Boy Scouts and Girl Scouts, to name just a few, for an annual clean-up. That clean-up has drawn over 100



Lee Walker

*Some 1,300 Virginia dams, like this one at Woolen Mills, obstruct fish migration and negatively impact stream conditions.*





Lee Walker

*The Woolen Mills Dam was eventually removed completely from the Rivanna River near Charlottesville in 2007.*

people during each of the last several years and spans some 20 or more miles of river, from the headwaters of the Rivanna all the way to where it empties into the James.

River clean-ups reflect just a small part of the RCS's action plan. Noting that human activities within the Rivanna River basin are increasing and placing pressure on natural habitats and water quality, the RCS has set out to create a multitude of solutions ranging from riparian buffer projects, landowner outreach and education programs, and a teacher watershed summit, to hosting a brown bag lunch for local politicians the



Lee Walker

*Above: Students examine young fish grown at DGIF hatcheries. Left: American shad are released into the Rivanna River.*



Lee Walker

third Thursday of every month to discuss issues facing the river. They do all of these things while continuing to host paddle trips, photo contests and other activities aimed at helping the river.

The society's efforts also focus on educating youth about the watershed and the importance of maintaining clean water for those who follow. A Youth Watershed Summit, Student Intern Corps, and World Water Monitoring Days are all aimed at getting youngsters involved in taking care of their environment, and specifically, the Rivanna River.

Perhaps their greatest success, however, took place after six years of

hard work with the breaching of the Woolen Mills Dam on August 15, 2007. Jason Halbert of RCS volunteered untold hours working with fisheries biologists at DGIF and other project partners to make this dream become reality. It was a moment in time, he believes, signaling better days ahead for the river. □

For information about the Rivanna Conservation Society:  
[www.rivannariver.org](http://www.rivannariver.org)  
 P.O. Box 1501  
 Charlottesville, VA 22902  
 434-977-4837

*Tee Clarkson is an English teacher at Deep Run High School in Henrico County. In the summer he runs Virginia Fishing Adventures, a fishing camp for kids. Contact him at [tsclarkson@virginiafishingadventures.com](mailto:tsclarkson@virginiafishingadventures.com).*



# Magic Happens



*Above: Big books help tell nature's big story.*

*Left: Kindergartners watch their gardens grow.*

*Below left: What is going into our waterways?*

story and photos  
by Gail Brown

**F**airfax County's Wolftrap Elementary School has always had a wolf-sized share of quality programs and extracurricular activities. But when a small, energetic group of parents decided to shine the light on environmental education, exciting projects began popping up everywhere—almost like magic. Click your heels twice: a 400-foot woodland trail appears! Toss out some seeds: over 100 native trees spring from the ground! Snap your fingers: fun-filled classroom activities bloom. Spin around twice and... oh my gosh, don't spin! Who *knows* what might happen then?

While academic enrichment programs have always been supported by Wolftrap's PTA, until three years ago environmental education was not a focal point. But when certified environmental



*Dedicated students at Wolftrap Elementary School plant trees, educate others about the benefits of recycling, and work to protect their watershed — proving how kids can make a difference in their community.*



# at Wolftrap



**Top:** Principal Blain (right) and helpful students care for young plants.  
**Above:** Recycling makes a big difference at Wolftrap.

educator Elizabeth Burke, former biology teacher Elizabeth Hurley, and Sheri Soyka, editor of environmental curricula, joined forces to request additional environmental lessons and activities for all grade levels, magic became reality.

Here's what Burke, Hurley and Soyka proposed: They would devel-

op hands-on environmental education lessons based on Virginia's Standards of Learning; they would train parent volunteers to present the lessons to K-6 classes (pending teacher requests); all materials would be supplied, including a step-by-step guide on presenting the lesson; the program would be called HOWL (Helping Our World by Learning); and—oh, one more thing—they would guarantee happy and involved kids at day's end. Magic to spare!

Burke and friends did their homework. As planned, they researched environmental programs already on the approved list of the state Department of Education's "Science Standards of Learning" Web site. The team selected three lessons—one each for March, April and May—and adapted each to fit various grade levels. Finally, flyers were prepared to send home in each child's homework folder so that parents could be involved in the activity once again around the dinner table. Could a teacher ask for more?

Upon hearing the plan Dr. Anita Blain, Wolftrap's energetic and forward-looking principal, wasted no



**Above:** Classes that feed the birds see the birds—up close!

time in working with the PTA to help make Burke's dream a reality. When Lisa Deaton, coordinator of Virginia Project Learning Tree® (PLT), approved an individualized training schedule for teachers and parents, Soyka became the official PLT facilitator and everyone felt empowered to take the final step. In less time than it takes for seeds to sprout, HOWL burst onto the scene and changed for-





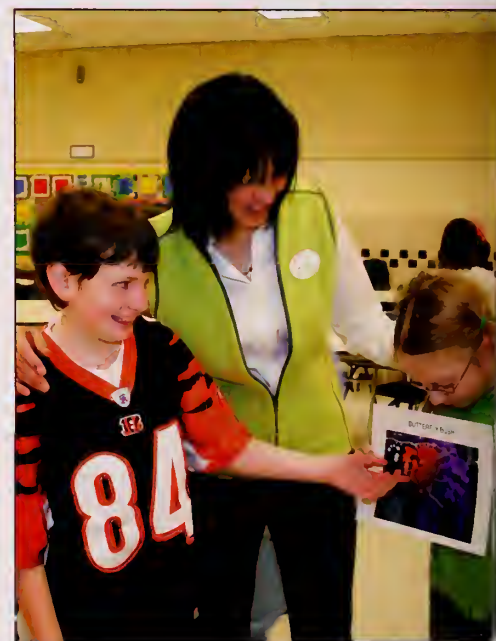
ever the way Wolftrap viewed its stewardship responsibilities.

But perhaps this makes things sound too easy. Volunteer Robin Kolko laughs, "I never would have volunteered if I had known more ... with no science background I can't pretend I know something I don't." But training and support calmed most of the "butterflies," and today Kolko can't stop talking about the benefits of HOWL. "I learned a lot. You learn from the kids. If you don't know something you can say, 'Maybe we can look it up.' I can do that."

Following quickly on their initial success, HOWL teamed up with the PTA grounds committee to form



*Top: Roots from invasive plants are awfully strong!  
Above: Sixth graders discuss the environmental themes in their spring musical.*



*Play a game—learn about the environment!*



Project Learning Tree® (PLT) is a program of the American Forest Foundation ([www.plt.org](http://www.plt.org)). In Virginia, anyone who teaches about the environment can attend a free workshop. Attendees receive PLT's *Pre-K-8 Environmental Education Activity Guide* or an appropriate secondary module. For more information or to schedule a workshop for your school, contact Lisa Deaton at [lisa.deaton@dof.virginia.gov](mailto:lisa.deaton@dof.virginia.gov) or call 804-328-3031.





**Above: This root is different—I can feel it!**

troops creating habitat areas, kindergartners playing tug-of-war with radishes, and everyone getting to know nature in a wonderful way.

Students at all grade levels, led by their Student Council Association, work to make everyone aware of the benefits of recycling, too. The student association began recycling paper and plastic last year and plans to expand their efforts to other materials.

"I feel really good about the recycling program at Wolftrap," says Maria. "It gives a good way for students to help the environment and set an example for the community and other schools ... I think it's making a difference; recycling has become something natural at our school."



**Above: This HOWL activity shows controlling invasive species is no game.**



**Above: Everyone gets excited about HOWL lessons.**

Growing Together Gardens (GTG), Wolftrap's initiative to get their kids outside and face-to-face with the natural world. Before GTG the grounds around Wolftrap resembled campuses in other busy suburbs—lots of grass, ornamental plants, and empty space. Now with the help of GTG members Kim Scott, a landscape architect, and Joanne Hardison, chair of the grounds committee, GTG has bloomed beyond expectations. Today a plan is in place for extensive, kid-created "learning-scapes." And on any given day you'll find scout

The dedication that students at Wolftrap show daily as they plant trees and improve habitat for songbirds, educate others about the benefits of recycling, and work to help protect their watershed is making a difference in their lives and in their community.

As Nathaniel says, "I help the environment by working with my Cub Scout Pack to stop littering. It's good to know we can make a difference in our world no matter what our age."

Language Arts teacher Ellen Collins thinks the kids' efforts are something to sing about, too. So before anyone could say "Conowingo"

(a Susquehannock word, meaning "at the rapids"), Collins and music specialist Linda White wrote a musical called *Chesapeake* that all 100-plus sixth graders will produce this spring.

In the play, campers at Camp Conowingo study ecology and mobilize to help protect nature in the face of environmental threats. The sixth grade students will assume responsibility for all stage work, costumes, scenery and publicity. They will even create a "museum" to help get the environmental message out to family and friends. One of the songs in the play, "Dear Madame Representative," is about writing to your representative in Washington, D.C., to promote environmental legislation.

Uh-oh! It doesn't take a crystal ball to see that *their* representatives are going to need a magic wand to help answer mail in the fall. But that's what education is all about, isn't it? And aren't we proud when children display those leadership traits that make such a difference in our lives? □

*Gail Brown is a retired principal for Chesterfield County Public Schools. She is a lifelong learner and educator, and her teaching and administrative experiences in grades K-12 have taught her that project-based environmental programs teach science standards, promote core values, and provide exciting educational experiences for the entire community.*





# Journal

## 2008 Outdoor Calendar of Events

Unless otherwise noted, for more information go to the "Upcoming Events" page on the Department's Web site at [www.HuntFishVA.com](http://www.HuntFishVA.com).

**May 3:** *Canoe Fishing Workshop*, Beaverdam Swamp Reservoir, Gloucester.

**June 24:** *Smallmouth Workshop*, New River, Radford.

**August 5:** *Flat Out Catfishing Workshop*, James River, Richmond.

**August 22-24:** *Mother-Daughter Outdoors*, Holiday Lake 4-H Educational Center, Appomattox. For females 9 years of age and above.

**September 20:** *Fly Fishing Workshop*, Riven Rock Park, Harrisonburg.

**October 18:** *Family Fishing Workshop*, Bear Creek Lake State Park, Cumberland. □



by Beth Hester

*Fishing Knots*  
by Lefty Kreh  
2007 Stackpole Books  
1-800-732-3669  
[www.stackpolebooks.com](http://www.stackpolebooks.com)

In 1991, *Practical Fishing Knots*, a little paperback with a bright yellow cover, found its way into the homes of avid anglers across the country. Penned by fishing legends Mark Sosin and Lefty Kreh, it covered knot tying essentials for all fishing preferences: freshwater, saltwater, fly, bait and spinning.

Now, Lefty Kreh has created a new volume targeted to light tackle and fly anglers. *Fishing Knots* is precisely illustrated, and packed with helpful tips for achieving maximum line strength and bulletproof connections. From lines and leaders, to wire knots and loops, Lefty covers it all, with common sense and angling wisdom. The volume is made especially useful by the addition of a spiral coil hidden within the conventional spine; readers can practice knots while the book remains open and level on the work surface. A bonus 72-minute DVD features Lefty tying 30 of his favorite knots. □

## Waterfowl Hunt a Big Success

by Jimmy Mootz

On Saturday, February 2nd, VDGIF outdoor education staff assisted the Virginia Waterfowlers Association and the National Wild Turkey Federation's Wheelin' Sportsman Program with a waterfowl hunt for handicapped persons. Education staff briefed the seven handicapped hunters (and one assistant), four active duty members of the Armed Forces, and two youth hunters in the basic rules of firearms

safety, zones of fire, and blind safety. Following the safety briefing, the hunters were transported to specially designed blinds for handicapped hunters. Professional staffers from several call makers served as guides for the hunt, providing instruction in the subtleties of hunting the Canada goose, as well as the art of calling.

While the hunters were busy in the blinds, volunteers from the waterfowlers association busied themselves preparing and then delivering hot breakfast sandwiches to them. (Talk about service!) Later in the morning, the hunters took a break to partake of a hot lunch consisting of hot dogs and hamburgers, along with all the trimmings, provided by WalMart®. After lunch each hunter received a gift bag, with items provided by the Department's Outdoor Education Program, the Virginia Waterfowlers Association, Mechanicsville Dodge, Dance's Sporting Goods, and Bass Pro shops.

This was a very well organized event, and it demonstrates the power of partnership in action. The partnership confirms that our sporting heritage is strong—as evidenced by widely divergent groups coming together to make a great hunt possible for a deserving group of hunters. □







## Outdoor Kids

Serious anglers, move over! Congratulations to Matt Gencay, who landed his first catfish last summer from a small pond on his grandfather's property in Marshall, Virginia. Matt was just 6 years old at the time. According to his grandfather, William Perkins, "The cat was hardly a record breaker but put up a scrappy fight for several minutes." Recalling Matt's big excitement, he adds, "I thought for a moment he was going to tackle it." We are also proud to report that Matt released the fish, as he does all of the fish he catches. Way to go Matt!

**Free Freshwater  
Fishing Days**  
June 6-8, 2008

### Greetings from West Broad Street!

It is both a thrill and an honor to be at this desk, working on behalf of *Virginia Wildlife*. Since moving to King & Queen County in 1990 this magazine—more than any other—has served as my compass, leading me in the right direction as I settled into new surroundings. At the time I was living on the banks of the Mattaponi River just around the bend from the Walkerton Post Office.

My neighbors were loud and unruly, and punched a different time-clock than the sort found in the big city. Throughout the river valley they woke me up early and didn't think twice about squawking at their young'ns at dusk. They entertained me with their vocal ranges and piqued my curiosity with their now-you-see-me, now-you-don't antics. Canada geese, white-tails, otters, red-winged blackbirds: these are just a few of the members of a traveling troupe that I came to know and respect.

So I did what any sane person would do. I bought a kayak and hit the water! Back in the guts of a freshwater marsh, where pre-school is well underway by sunup and where beauty unfolds in the violet heads of spring pickerelweed, is where I learned what so many of you already know. The finest part of the hunt, or the cast, or in my case the paddle, is the journey that leads you there. It is the quiet moments when your senses are tuned in and turned on that you begin to figure out your place in this world. It's where you get humbled, and awed, and eventually, grounded.

I hope to use the pages in this magazine to share with you—our readers—how Virginians far and wide make similar connections to the wild and, in the process, get grounded too.

*Sally Mills*  
Editor

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### Reading Your Label

Is it time to renew? If you are uncertain when your subscription expires, look for the expiration date in the circled location on the sample above.





"My horoscope said I would be taking a long trip today."

## Rights-of-Way Benefit Wildlife

by Marc Puckett

When you think of wildlife habitat, a power line right-of-way may not be the first thing that pops into your mind. Well, maybe it should. There are approximately 450,000 acres of rights-of-way under management in Virginia today. Nearly 35 percent of those rights-of-way accommodate electric power lines. So what, you ask?

Well, in the late 1990s American Electric Power (AEP) and Dominion-Virginia Power each recognized the potential their rights-of-way (ROW) had for quail and other early-succession species and began developing habitat cost-incentive programs. The programs began in 1999 with the first of many landowner habitat contracts signed. AEP and Dominion are proud to announce that their programs remain available, and we are taking this opportunity to encourage Virginia property owners to participate.

Each of these power companies will pay a flat rate of between \$200 and \$250 per acre (with a maximum of 10 acres per landowner) for establishing wildlife habitat on approved sections of power line. The landowner must agree to implement the habitat design and maintain the approved section of ROW for three years from the time of planting. To enroll in the program contact your local Department of Game and Inland Fisheries district biologist through a regional or field office, or by calling the main office in Richmond and inquiring about your service area (numbers and locations are available on our Web site at: [www.huntfishva.com](http://www.huntfishva.com)).

Our wildlife biologists will determine if you are eligible and, if so, come to your property, help you complete the one-page application, determine the portion of power line you wish to work with, and develop a brief action plan. This is submitted to the appropriate power company for approval. Once that happens, the landowner implements the practices prescribed and notifies AEP or Dominion upon completion. A Dominion or AEP representative will inspect the project and approve payment.

So what are you waiting for? Start "ROWing" your way to more wildlife today. □

## Kudos to Outdoor Writers!

by Marika Byrd

At its annual membership meeting in March, the Virginia Outdoor Writers Association recognized winners in three writing competitions. In the youth writing category, Micheala Bryant from Bishop Sullivan Catholic High School, Virginia Beach, won first place for her hilarious "Attack of the Does." Second place went to Maya Nedeljkovich, Ocean Lakes High School, Virginia Beach, for "Majesty of Nature." "Nature Shock" won third place for Madison Joi

Shaw, also of Ocean Lakes High School. Micheala and Madison read their articles before the audience and received their prizes.

For the third year, an undergraduate writing contest was held. The first-place winner was Beth Mutchler who read her funny entry, "Keeping It Wild." Beth is an outdoor recreation major in the College of Natural Resources at Virginia Tech. "For the Love of Running" won second place for Sarah Keithley, a graduating senior in hotel and tourism management at the Pamplin College of Business. Each winner received a financial award.

In the Association's "Excellence-in-Craft" competition, the following were presented as winners:

In the Bob Gooch Column category, Bill Cochran took first place with "I've Been on Both Sides of the 'No Hunting' Sign," which appeared in the *Roanoke Times*. "Fly Presentations Guaranteed to Catch Fish" took second for King Montgomery, as published in *An Angler's Journal*. *Bristol Herald* readers learned about "Gunsmithing: Attention to Detail," which won third place for Alan Gregory.

In the feature category, King Montgomery's "Where the Sky is Born" took first place and it appeared in the *Virginia Sportsman*. Tom Scanlan was recognized for his second-place "Tale of Two Sons," published in *Woods & Waters*. Third place went to Emily Grey for *Virginia Wildlife's* publication of "Membership Has Its Privileges."

Emily Grey took first place in the photography category with "Journey to Earth's End, Gentoo Penguin." King Montgomery's full-page color depiction of an angler fishing just downstream of the former Embury Dam won second place. The photograph was used by Bob Clouser in *Fly-Fishing for Smallmouth in Rivers and Streams*. Blue Ridge County liked Marie Majarov's third-place winner on the "Monarch Butterfly Life Cycle." □



# On The Water

by Jim Crosby



## Drop Your Prop and Get a Jet!

**H**ave boat props outlived their usefulness? They maim, injure and kill aquatic life, and all too frequently, they maim, injure and kill humans as well. Boat props represent one of the most dangerous aspects of recreational boating, and for that reason some would like to ban their use. Currently, props push or pull over 80 percent of all recreational watercraft through the waters they ply. Over the years we have heard all sorts of ideas about how to make them safer. One idea gaining momentum more recently is to drop them entirely, making a switch to water-jet-propelled power plants.

Jet-powered boats have been around for a very long time, dating back to at least the 1950s when I first became acquainted with them. They were originally custom creations and, pitted against the mass produced prop power plants, just never gained popularity—mostly due to cost and lack of availability.

Well, there is a new wave coming, and it is jet-propelled watercraft. The popularity of Kawasaki's Jet Ski®, legally referred to as personal watercraft (PWC), has led the way. Research and mass production of the PWC has pushed jet propulsion into the realm of possibility for all kinds of vessels. Starting off with small engines of around 30 horsepower, manufacturers now offer up to 80 hp for PWCs and way beyond for other recreational boats.

I have found jet-powered boats up to 24 feet long, pushed by a 390-hp engine powering a water jet pump that will propel the vessel up on plane in a matter of seconds. And manufacturers now have jet-powered boats for water-

skiing, fishing, cruising and every other recreational use you can imagine. I predict they are just the beginning of a whole new approach to powering recreational watercraft.

Why? Jet-powered boats are much safer than props—representing almost no threat to human or aquatic life. They operate in shallow water down to a few inches, and they have fewer moving parts to break or wear out. They are more efficient and very agile in handling. They are the power of choice for pulling water skiers, wake boarders and tow toys because you eliminate that spinning meat grinder back there where people board as well as the threat of chopping up tow lines. Jet-powered boats are catching on with fishermen, too, who can move into shallow water without worrying about rocks chewing up their prop or their prop chewing up their fishing lines.

How? Jet-powered boats use a direct drive engine without any gears or transmission. The engine drives a water pump that sucks water in the front and pumps it out the rear under considerable pressure. The pressure of the exhausted water propels the vessel and steers it by the movement of the exhaust nozzle from side to side—just like a jet airplane pushes air through its exhaust. Reversing and stopping are accomplished by re-directing the water flow forward.

While personal watercraft have led the way, there now exist jet pumps that can be attached to many internal combustion engines of various sizes—opening the door to untold innovations of boat design. Strolling around the Internet, I found lots of choices for almost every recreational use. Personal

watercraft sales are pretty much dominated by Sea-Doo and Yamaha these days. However, even those companies are jumping into the jet-powered recreational vessels that you can ride *in* instead of *on*. Sea-Doo offers a whole selection of runabouts of the more conventional design, with some incorporating dual engines.

Yamaha has brought along a line of more efficient 4-cylinder, 4-cycle outboard motors—ranging from 30 to 80 horsepower—that feature jet drives. They can be mounted on the transom of any vessel designed for an outboard motor. This represents a great retrofit for that old gas-guzzler, in addition to the safety factor and lack of smelly oil-smoke exhaust.

For those who want to build their own, plans and kits are available from companies such as Glen-L Marine to build a great variety of boats in which you can install jet power plants.

Hamiltonjet claims to be the leader in boat propulsion. They offer a range of products for vessels up to 180 feet. Introduced in the mid-1990s, they offer jet pumps suitable for coupling to small block Chevrolet and Ford engines.

Custom Weld Boats, Weld Craft and Snyder Jet Boats have extensive lines of boats featuring outboard jet drives.

In the long run, jet drives for recreational vessels offer the best solution to eliminating the damage caused by props with their exposed blades. □

*Please Note: I always welcome feedback, input and/or suggestions from readers. My email address is: jecrosby@comcast.net.*



# Photo Tips

by Lynda Richardson

## Tips for Creating Better Photographs - Part 2

In last month's "Photo Tips" column, I made a few suggestions regarding sharpness, composition and "cleaner" foregrounds and backgrounds, hoping to help fellow photographers create better imagery. This month, I'd like to continue that train of thought with other aspects of a photograph—particularly important when submitting to our photography competition.

The digital age is here, and boy do we love to play in Photoshop! But I will have to say that nothing turns off an editor or a contest judge more than photographs that are overly saturated. The unnatural look of neon green grass and eye-popping red flowers is not something we like to see within the context of nature photography. Try to keep your colors as true to the natural world as possible. If you feel that your processed image colors are accurate, just for fun take a CD or jump drive with a few of your photos around to friends and family to see how those same images look on their computer monitors. You might be surprised at the differences you see. If you want to get more accurate color, you will have to process your digital images on a calibrated monitor—and hope that others viewing your images also have properly calibrated monitors. The staff at *Virginia Wildlife* does have accurately calibrated machines, so we're all set at this end. (Look for more on monitor calibration in a future column.)

Another nagging issue concerns photographs that bear time and date stamps. Why would you want ugly orange text across the bottom of a beautiful photograph? Not only does it distract you from the subject matter, most of the time the obnoxious text can't easily be cropped out or "repaired." Please, if you think you're going to be shooting some contest-quality photographs, turn off the time/date function on your digital camera! The time and date should



*Over-saturating your digital files can make them appear unnatural and feel unsettling. Shown here, we compare an overly saturated photograph of flowers (top) to one that is more natural (above). Photos by Lynda Richardson.*

be recorded in the file information of your images anyway.

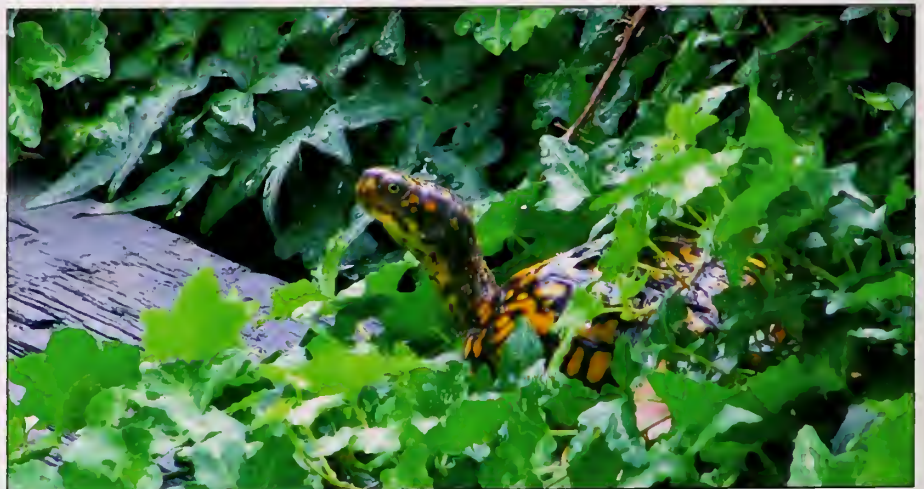
And speaking of file information, if you are able to access the IPTC (International Press Telecommunications Council) information for your digital photographs, make sure to have your contact information imbedded within each file. If you

work in Photoshop click on the image, go to FILE, and then to FILE INFO. Here you can make a template with your name, address and phone number, and apply it to all of your files. Be sure to save it! This information should stay with your digital image wherever it travels. For additional tips check out, "IPTC: An Important Part of Digital Photography" in *Photo Tips, Virginia Wildlife*, November 2007.

I hope these suggestions will help in your pursuit of capturing great images and also increase your chances of creating award-winning photographs in the future. Happy shooting! □

You are invited to submit one of your best images to "Image of the Month," *Virginia Wildlife Magazine*, P.O. Box 11104, (4010 West Broad Street), Richmond, VA, 23230-1104. Send original slides, high quality prints, or high res jpeg files on disk and include a self addressed, stamped envelope or other shipping method for return. Also, please include any pertinent information regarding how and where the image was captured, what camera, film and settings you used. I hope to see your image as our next "Image of the Month!"

### Image of the Month



*Congratulations go to Glenn W. Schumaker, of Scottsville, for his wonderful photograph of an eastern box turtle passing through his backyard. Glenn used a Canon Powershot S1 IS digital camera to sneak a peek at this endearing reptile. Good spotting, Glenn!*



# VIRGINIA WILDLIFE OUTDOOR CATALOG

## 2007 Limited Edition Virginia Wildlife Collector's Knife

Our 2007 Collector's knife has been customized by Buck Knives. This classic model 110 folding knife is 8 1/2" long when fully opened and has a distinctive, natural woodgrain handle with gold lettering. Each knife is individually serial numbered and has a mirror polished blade engraved with a fox. Our custom knife comes in a solid cherry box with a collage of foxes engraved on the box cover.

Item #VW 407

\$90.00 each (plus \$7.25 S&H)



## 2006 Virginia Wildlife Collector's Knife

This year's knife has been customized for us by Buck Knives. Each knife is individually serial numbered, and comes with a distinctive rosewood handle and gold lettering. This year's knife also includes two white-tailed deer etched on the blade. This custom knife not only comes with a leather sheath, but also a custom made solid, cherry box with a decorative wildlife scene engraved on the cover.

Item #VW-406

\$85.00 each



## 2005 Virginia Wildlife Collector's Knife

This year's knife has been customized for us by Buck Knives and has a cut out blade of a hunter and his dog. Each knife is individually serial numbered and comes with a distinctive rosewood handle and gold lettering. This custom knife comes in a decorative solid cherry box with a hunting scene engraved on the cover.

Item #VW-405

\$75.00 each

To Order Visit the Department's Web Site at:  
[www.HuntFishVA.com](http://www.HuntFishVA.com) or call (804) 367-2569  
Please allow 3 to 4 weeks for delivery.

**National  
Safe Boating Week**  
**WEAR IT!**  
**May 17-23, 2008**





Outdoor Education Program  
presents

# Mother & Daughter *Outdoors*

August 22-24, 2008

This workshop is designed primarily for females. It is an excellent opportunity for females 9 years of age and above to learn the outdoor skills usually associated with hunting and fishing, but useful in a variety of outdoor pursuits.

## This workshop is for you if:

- You would like to get your family involved in outdoor activities and need a place to start.
- You have never tried outdoor activities but have hoped for an opportunity to learn.

- You are a beginner who hopes to improve your skill.
- You are looking for camaraderie of like-minded individuals.

All of our courses focus on outdoor skills using hands-on instructional techniques. Our outdoor skills courses include outdoor cooking, fly fishing, wild edibles, introduction to firearms, skeet shooting, archery, intro to rifle, wilderness survival, map and compass, animal tracking and many more.

This year's event will be held at Holiday Lake 4-H Educational Center near

Appomattox, Va. Registration fee is \$85 per person, which includes meals, lodging, course instruction, use of equipment and evening events. Registration deadline is August 1, 2008, at 5:00 p.m.

For more information visit our Web site [www.dgif.virginia.gov/events](http://www.dgif.virginia.gov/events) for a listing of events with links to registration forms for downloading. Information can also be obtained by calling the Outdoor Education Office at (804) 367-0656 or (804) 367-7800.



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